Recap: Ed's suggestion how to read Decoded output

No Rocs, Token bypassed.

Header
0111 1111 1100 Header ID
0000 0001 Event Number
0000 0001 Status bits

Trailer
0111 1111 1111 Trailer ID
0110 0010 Status Bits (TBM Reset,ROC Reset,Cal Trigger)
0100 0000 Temperature/Status Bits (Ignore this)

Recap: Ed's suggestion how to read Decoded output

No Rocs, Token not bypassed.

Header
0111 1111 1100 Header ID
0000 0001 Event Number
0000 0001 Status bits

00000000000000000000000000000000 (garbage, waiting for PKAM Reset)

Trailer
0111 1111 1111 Trailer ID
0110 0010 Status Bits (TBM Reset,ROC Reset,Cal Trigger)
0100 0000 Temperature/Status Bits (Ignore this)

HDI #19 *(The Good One)*

```
> decode
1000 words allocated for data buffer
size = 4
size = 4
#samples: 4  remaining: 0
 FF7F=1111111101111111
 C010=1100000000010000
 17FF=0001011111111111
 6240=0110001001000000


#samples: 4  remaining: 0
 FF7F=1111111101111111
 C010=1100000000010000
 17FF=0001011111111111
 6240=0110001001000000
```

Header
Trailer
Status bits (TBM reset etc)

(looks like
token is bypassed
as we don't see
garbage between
Status bit and trailor:

?

but Mike/Ashish
confirmed that
token is not bypassed
for these HDI's)

Ed has been asked

How *startmod3* was modified?

```
--- setup TBM ----------------------------
modsel b11111
modsel 0

tbmset $E4 $F0     Init TBM, Reset ROC
tbmset $F4 $F0
tbmset $E0 $00     Disable PKAM Counter
tbmset $F0 $00
tbmset $E2 $C0     Mode = Calibration
tbmset $F2 $C0
tbmset $E8 $02     Set PKAM Counter
tbmset $F8 $02
tbmset $EA b00000000 Delays (?)
tbmset $FA b00000000
tbmset $EC $00     Temp measurement control
tbmset $FC $00

mdelay 100
```

(Robert suggested disabling the trigger to the ROCs)

tbmset $E0 $40
tbmset $F0 $40

Recap: How Status Bit looks like

No Rocs, Token not bypassed, No Trigger Output Bit Set.

Header
0111 1111 1100 Header ID
0000 0001 Event Number
0000 0001 Status bits

Trailer
0111 1111 1111 Trailer ID
1110 0010 Status Bits (No Token Pass,TBM Reset,ROC Reset,Cal Trigger)
0100 0000 Temperature/Status Bits (Ignore this)

HDI #21

- *This HDI had problem with Core A*

(after disabling the trigger to the ROCs)

```
size = 4
size = 4
#samples: 4  remaining: 0
 EFF8=1110111111111000
 0202=0000001000000010
 0FEC=0000111111101100
 481F=0100100000011111


#samples: 4  remaining: 0
 EFF8=1110111111111000
 0202=0000001000000010
 FFEC=1111111111101100
 481F=0100100000011111
```

```
size = 4
size = 4
#samples: 4  remaining: 0
 7FC0=0111111111000000
 1817=0001100000010111
 FFE2=1111111111100010
 C0FF=1100000011111111


#samples: 4  remaining: 0
 7FC0=0111111111000000
 1817=0001100000010111
 FFE2=1111111111100010
 C0FF=1100000011111111
```

Note: Perfect Trailer – followed by Status Bit for No Trigger Output

HDI #30

```
size = 4
size = 4
#samples: 4  remaining: 0
 7FC0=0111111111000000
 1817=0001100000010111
 FFE2=1111111111100010
 C0FF=1100000011111111


#samples: 4  remaining: 0
 7FC0=0111111111000000
 1817=0001100000010111
 FFE2=1111111111100010
 C0FF=1100000011111111
```

(after disabling the trigger to the ROCs)

And ..
Same observation for HDI #18, #20

Inference: Decoder working fine – disabling the trigger out the problem goes away. (Mike Matulik/Ashish confirmed that the token bypass is not wire bonded.)

Back up: HDI pads